

out of the egg' cannot be ruled out. In such a case, the frequency of occurrence of blindness can be accepted as 2.1% of the eggs incubated.

Retarded growth: Singh and Bustard (1982b) recorded 186 cm and 15.4 kg for the blind gharial five years after hatching, against 278 cm and 71.8 kg for normal gharial captive reared under identical conditions at Tikerpada. In the present study we recorded 120 cm and 4.8 kg nearly 6.5 years after hatching for the blind gharial at Nandankanan. These data indicate that blind gharials are not

only difficult to hatch alive but also do not grow at normal rates.

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August 1, 1990

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21. CANNIBALISM IN THE STAR TORTOISE *GEOCHELONE ELEGANS*

Tortoises in general are herbivorous, though there are odd records of their picking up animal material. Whitaker (*JBNHS* 71(1): 147-148) reports a star tortoise *Geochelone elegans* feeding on a dead mouse. Das (*INDIAN TURTLES: A FIELD GUIDE*, 1985) has mentioned that star tortoises sometimes eat snails, bird droppings and carrion.

From 1960 to 1975, I used to keep large numbers of star tortoises of different sizes for export. In 1969 it was observed that one male, believed to be about 15 years of age, was very vicious and attacked others. One day a small, three to four year old tortoise was found dead with its head

eaten. On each of the following two days, one more tortoise was found dead. All three tortoises had lost only their heads. Shrews sometimes kill tortoises, and on the fourth day a careful watch was kept. It was observed that the old male attacked the smaller tortoises (all 3-5 years old). In all four cases only the head was eaten; the legs were retracted and uninjured.

Cannibalism in turtles and tortoises is apparently rare. In the predominantly herbivorous tortoises this phenomenon is especially interesting.

October 15, 1990

P.W. SOMAN

22. THE FRESHWATER TURTLE FAUNA OF EASTERN RAJASTHAN

(With a text-figure)

The present paper describes the freshwater turtle fauna of eastern Rajasthan, particularly of the rivers Banganga and Gambir, the water source for the Keoladeo National Park.

METHODOLOGY

The Banganga and Gambir river systems extend from the north of Jaipur in the west to the north-east of Dholpur in the east. Both rivers are non-perennial. The Keoladeo National Park which lies in their flood plain receives water from them during the rainy season.

The pools along the course of the rivers, associated reservoirs, and nearby village ponds were surveyed for

turtles. Fish nets were used to collect turtles, and turtles were also caught by hand from shallow water. Wetland areas which had gone dry were also surveyed and shells collected.

The nomenclature followed is that of Iverson (1986). Most of the survey sites were covered during the dry season from May to July 1989. The Keoladeo National Park was surveyed from January 1988 to December 1988.

RESULTS AND DISCUSSION

A total of 25 water areas were surveyed (Fig. 1), which include 5 sites in Banganga, 17 in Gambir and 2 in